

Agilent SLIMS for Biobanks

From start to finish, we've got you covered.



Collect. Store. Discover.

Biobanks play a crucial role in medical research by having robust and even rare biospecimen samples readily available for clinical studies. As biobanks continue to collect samples from a growing number of sources and may store them for both short- and long-term tenures, the need for implementing a digital solution that copes with the requirements and procedures for consistent operations is obvious. With SLIMS, Agilent provides a comprehensive software solution that manages and tracks all biobank samples over their entire lifetime. This includes quality control measures to be taken during sample collection, prior to sample accession, and upon use of the sample, to ensure biological material and data collections of the highest quality possible.



Track information end-to-end

SLIMS modernizes the management of your biobank samples, procedures, and results. Your lab personnel are guided through the procedures and can collaborate naturally. SLIMS makes data instantly accessible to authorized lab personnel, and managers, even remotely.

Streamline data management

SLIMS brings a consistent, holistic approach to managing your lab's biospecimen samples and their related data, improving the quality of research and the reliability of results.

Adjust to your needs

With a flexible data model that captures all the relevant metadata, and a workflow module that meets the complexity of your procedures, SLIMS will fit to the needs of your lab.

Subject and specimen management



Sample reception

Register your subjects and samples according to your lab terminology and enroll them in the studies they take part in. Record and keep track of any information you need on the subject as well as the consent status for each study they are enrolled in. Keep track of all sample collection events.



Sample processing

SLIMS guides you through the process execution for extracting and isolating the genetic material from the specimen and maintain all derivations you create from a sample, all while preserving the entire sample chain of custody.



Sample aliquoting

Automate your aliquoting by predefining what process the sample will undergo in the study design. Predefine and track any additives included with your samples. Track the aliquots, pooled samples, and the samples processed for experiments.

Requirements and recommendations for biobanks



ISO 20387:2018 specifies general requirements for the competence, impartiality, and consistent operation of biobanks including quality control requirements to ensure biological material and data collections of appropriate quality.



ISBER recommendations for Repositories Fourth Edition presents the most effective practices for the management of biological and environmental specimen collections and repositories.

Storage management



Specimen storage

SLIMS features comprehensive location and storage management and tracks all storage parameters and analytical variables that need to be considered and may impact the quality of the samples. This includes every step starting with method of collection, the used labware, the turnaround time, handling, extraction methods, and temperature, transportation conditions, and final storage conditions.

I need:

- Quick and easy overview of sample, status, workflows, and storage locations
- Highly configurable sample annotation
- Genetic sample relations with pedigree report
- Workflows with step-by-step user guidance
- Data validation options
- Integrate with freezer management systems, instruments, and hospital EMR systems

SLIMS

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I need:

- Full-scale chain of custody
- Study design for multi-studies support
- Longitudinal studies with different collection time points
- Searchable with customized exports, and reports
- Highly adaptable environment, compatible with the cloud
- Supports ISO 20387:2018 requirements, ISBER recommendations, and SPREC nomenclature

SLIMS

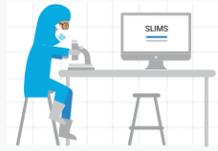
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Did you know?

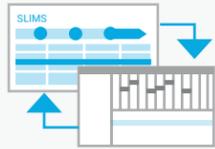
Standard **PRE**analytical **C**ode (SPREC) is a seven-element code corresponding to the most critical preanalytical variables of fluid and solid biospecimens. SLIMS captures these critical preanalytical data points as specimens are processed and stored. The SPREC is displayed in the specimen details, allowing full traceability and documentation for downstream analysis.

Sample tracking



Monitoring

Execute your quality control (QC) procedures in SLIMS and apply the best practices to determine the quality metrics during the sample life cycle. SLIMS facilitates reliable, compliant material traceability and assists users to find out if a particular sample was correctly handled prior to and during storage, to review who manipulated it, and even see freezer temperature changes over time.



Instrument interfacing

SLIMS interfaces with all instrument types including the Agilent TapeStation, Bioanalyzer, and Fragment Analyzer systems to efficiently assess the sample integrity. SLIMS sends sample lists to the instrument software and imports the resulting quality metrics to the context of the relevant samples.



Sample retrieval

Find and access your samples of interest either via direct sample or subject search or by any required properties, like diseases, other subject properties, or relationships such as gender or age. Track relationships between family members to trace inheritable traits and conditions between related subjects and display them in a pedigree chart.



Sharing and shipping samples

Biospecimens are often shipped multiple times before reaching the end user. They travel from collection facilities, to laboratories responsible for processing and extraction, to biobanks for storage, and then finally to the end user. SLIMS provides shipping instructions and tracks all shipping events for you.

Deploy SLIMS at your discretion



SLIMS offers flexible installation options. It can be hosted by Agilent on a scalable, powerful, secure server, or by your favorite cloud service provider. The system can also be installed on a server within your IT infrastructure. SLIMS only needs a web browser, requires no further software on client computers, and can also be used on tablets.

Save time with SLIMS Store



When installed, SLIMS is ready to be adapted to your lab. Get a head start with the SLIMS Store and download premade configurations. Choose from a library of sample types, locations, metadata, automation snippets, and many more to make your solution operational as fast as possible. The biobank package supports a fast and efficient configuration of SLIMS to facilitate sample tracking in biobanks from subject registration to long-term storage.

Get support from SLIMS experts



Our SLIMS engineers are the real subject matter experts in science and laboratory informatics. They understand your domain and your workflows. They have deployed many solutions for labs across the globe and will assist you during the different phases of the project with installation, training, validation, and adjustment of the software to your needs.

Did you know?



The International Society of Biological and Environmental Repositories (ISBER) has identified the Agilent quality metrics as a way to assess the integrity and fragmentation of DNA and RNA. The DIN (DNA integrity number) and RIN (RNA integrity number) are numerical assessments of the quality of the nucleic acid by assigning each sample a score from 1 to 10. A high score indicates a highly intact sample. You can apply this metric, for example, to confirm reliable shipping between labs or the stability of the samples over long-term storage.

Learn more:

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